

SPOROBOLUS COAHUILENSES (GRAMINEAE)
A NEW SPECIES FROM COAHUILA, MÉXICO

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During an investigation of the grasses of Coahuila, some specimens were examined that do not correspond to any previously published species. They are described as a new species here.

Sporobolus coahuilensis J. Valdés, nov. sp.

Gramen annum; culmi glabri 15-60 cm. alti adscendentes. Foliorum vaginae internodiis breviorae glabrae, ligulae ciliatae pilis 0.5-1 mm. longis, laminae planae effusae 4--12 cm. longae saepe 1.5--6 mm. latae supra sparse ciliato-pustulatae non confertae. Paniculae 6--22 cm. longae diffusae 5--13 cm. latae vel raro contractae ca. 1 cm. latae; pedicelli verticillati bene evoluti, pedicelli saepe (2--)3--6(--8) mm. longi; spiculae 1--1.5 mm. longae; glumae tenues acutae, gluma infera ca. 0.5 mm. longa supera 1.4--1.5 mm. longa; lemma 1.3--1.4 mm. longum acutum; palea translucida 1--1.3 mm. longa; granum saepe 0.6--0.9 mm. longum oblongum pallide brunneum; embryo 0.2--0.4 mm. longus (Fig. 1).

Annual; culms glabrous, 15-60 cm. tall, ascending; sheathblades shorter than the internodes, glabrous; ligule ciliate, hairs 0.5 - 1 mm. long; blades flat, spreading, evenly distributed, 4 to 12 cm. long and usually 1.5 - 6 mm. wide, sparsely ciliate-pustulate in the adaxial surface.

Inflorescence open panicle, sometimes contracted, 6 to 22 cm. long. 5 - 13 cm. wide (1 cm. when contracted) pedicels in whorls well developed, ending in a spikelet; spikelets 1 - 1.5 mm. long on capillary pedicels (2) 3 - 6 (8) mm. long; glumes thin, acute, the first ca. 0.5 mm. long, the second 1.4 - 1.5 mm. long; lemma 1.3 - 1.4 mm. long. acute; palea translucid 1 - 1.3 mm. long; grain mostly 0.6-- 0.9 mm. long oblong light brown; embryo 0.2 - 0.4 mm. long.

Distribution, known only from Central Coahuila, near Las Delicias and Cuatrocienegas.

TYPE: Mexico, Coahuila, about 58 air-miles southwest of Cuatrocienegas, 6.4 road-miles northeast of turn-off to Las Delicias on highway 30; clay flats and gypsum outcrops; with Tidestromia tenella, Atriplex, Suaeda, Euphorbia, Acacia, Anulocaulis, etc. Annual. August 15, 1976. 815 m. alt., near 26°17' N., 102°40' W. J. Henrickson 15363 with B. Prigge (holotype: LL; isotypes: CSLA, MEXU and others to be distributed).

Additional specimens examined: about 72 airmiles southwest of Cuatrocienegas below the spring about 0.5 mile south of the main spring southwest of Las Delicias in limestone; infrequent around irrigated bean-patch; in shaded area; with Acacia berlandieri, Arundo, Celtis, Rhus, etc., 3,600 ft. alt., August 12, 1973, near 26°11' N., 102°50' W., J. Henrickson with T. Wendt (TEX, CSLA); Km. 11 al este de Cuatrocienegas, chaparral desertico, suelo arcilloso cafe, salitroso, 40 cm. de altura, amacollado, decumbente, September 24, 1955, 650 m. alt., E. Hernandez-X. & Mathus L. N-2025 (CHAPA, TAES); about 44 miles northeast of San Pedro de las Colonias, 6 miles northeast of Las Delicias turnoff along highway 30, 26°14' N., 102°41' W., on distinct outcrop of pure gypsum, with Larrea, Atriplex, Selinocarpus, Flaveria, Acacia, Suaeda, Nama and Fouquieria shrevei, frequent annual, 2980 ft. alt., August 25, 1971, J. Henrickson 6022 (LL).

This species is closely related to Sporobolus tuberculatus Hackel, a South American species (Stuckert, 1906), and S. pyramidatus (Lam.) Hitchc., a widespread species, and differs principally in the annual habit, size of the capillary pedicels and size of the panicle of S. coahuilensis. It is important to mention that S. tuberculatus is used as a synonym of S. pyramidatus by L. R. Parodi (1929).

Sporobolus coahuilensis is also closely related to S. patens Swallen, a species of annual grasses of North America. From the latter it differs in the size of the plants, the better development of whorls of capillary pedicels, the size of the spikelets, the size of the panicle, the much taller culms and wider leaf-blades.

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Figure 1. Sketch of a representative of Sporobolus coahuilensis, sp. nov. (left), along with enlarged views of the spikelet and a dot-map showing localities in Coahuila (right.)



LITERATURE CITED

- Chase, A. 1951. Hitchcock's Manual of the Grasses of the United States. Second Ed. U.S.D.A. Misc. Pub. 200, pp. 415-424.
- Parodi, L. R. 1928. Revisión de las gramíneas argentinas del género Sporobolus. Rev. Fac. Agron. y Vet. Univ. Buenos Aires. 6(2): pp. 154.
- Stuckert, T. 1906. Gramineaceas argentinas. Anales del Museo Nacional de Buenos Aires. Tomo XII (Ser. 3) pp. 470-471.
- Swallen, J. R. 1941. New United States grasses. Jour. Wash. Acad. Sci. 31(8): pp. 351-352.